

India
Ministry of Irrigation and Power

Report
of the Central water
and Power Commission
Reorganization Committee

1957-59



MINISTRY OF IRRIGATION AND POWER

**REPORT OF THE
CENTRAL WATER AND POWER COMMISSION
REORGANIZATION COMMITTEE**

1957-59

NEW DELHI

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REPORT
OF
THE C.W. & P.C. RE-ORGANIZATION COMMITTEE
1957-59

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APPENDIX I

(Ref. paragraph 2·11)

GOVERNMENT OF INDIA

MINISTRY OF NATURAL RESOURCES AND SCIENTIFIC RESEARCH

No. EL-1-201 (5)

New Delhi, the 21st April, 1951

RESOLUTION

The Government of India have reviewed the position regarding the two organisations at present dealing with Electricity and Waterways Development viz. the Central Electricity Commission and the Central Waterpower, Irrigation and Navigation Commission which were set up vide the late Ministry of Works, Mines and Power's Resolution-Nos. EL-1-201 (1) and DW. XVI-1(1), dated the 16th January, 1948. They have now decided, on grounds of economy and efficiency, to amalgamate these two organizations and constitute them into one organisation to be known as the Central Water and Power Commission. The composition, functions, etc. of the Central Water and Power Commission shall be as follows :—

1. *Central Water and Power Commission.*—The Commission will take over the functions of the Central Waterpower, Irrigation and Navigation Commission and also those of the Central Electricity Commission.

2. *Composition of the Commission.*—The Commission will be a strong technical organisation, and when fully constituted, will consist of a Chairman and four Members, two of them directing the Water Wing and the other two directing the Power Wing, and such other full-time or part-time Members as Government may, from time to time, find necessary. The Chairman and full-time Members will be fully qualified engineers. The Chairman will also be *ex-officio* Consulting Engineer to the Government of India. In order to give due emphasis to the needs of both Water and Power problems, and to co-ordinate the Designs work, three sub-committees, viz. Water Sub-Committee, Power Sub-Committee and the Designs Sub-Committee will be constituted. The Chairman of these Sub-Committees will be nominated by the Government of India for a specified period in the first instance out of the four Members of the Commission.

3. *Functions of the Commission.*—The Commission will be charged with the general responsibility of initiating, co-ordinating and furthering, in consultation with the State Governments concerned, schemes for the control, conservation and utilisation of Water resources, throughout the country, for purposes of flood control, irrigation, navigation and waterpower generation, as well as schemes of thermal power development and also schemes of transmission and utilisation of electric energy throughout the country. The Commission will, if so required, also undertake the construction and execution of any such schemes. In exercise of the above responsibilities it will be the function of the Commission—

- (a) to make all necessary investigations and surveys and when so required, to prepare schemes and designs :
 - (i) for the development of river valleys in respect of power generation, irrigation by gravity flow or lift, navigation, flood control, soil conservation, antiwater logging measures, reclamation of alkaline and saline soils, drainage and other related facilities such as malaria control, recreation and fish culture ; and
 - (ii) for thermal electric power development ;
- (b) to undertake construction work on any river valley development or electric power development schemes on behalf of the Government of India or State Governments concerned ;

- (c) to advise and assist, when so required, the State Governments (Commissions, Corporations or Boards that may be set up) in the investigation, surveys and preparation of river valley and power development schemes for particular areas and regions and in the surveying of potential sources of load, the forecasting of revenue from electricity supply and the formulation of electricity tariffs ;
- (d) to advise the Government of India in respect of water and waterpower rights and disputes as between different units, of the effect which any scheme for the conservation and utilisation of water may have on the interests of the concerned units and of the interpretation of agreements in this regard between different units and any matter that may be referred to the Commission in connection with river valley development ;
- (e) to advise the Central and State Governments on the administration of electricity legislation and control of electric utilities ;
- (f) to advise the Government of India in regard to all matters relating to electric power development, public electric utilities both private and State owned ;
- (g) to advise the Government of India in regard to the settlement of priorities for plant, materials and foreign exchange as between various river valley development and power projects ;
- (h) to collect, co-ordinate the collection of, publish and analyse data relating to waterways, tidal rivers, rainfall, run-off and temperature, ground water resources, silting and reservoirs, behaviour of hydraulic structure, etc., and to act as the Central Bureau of Information in respect of these matters ;
- (i) to collect, maintain and publish statistical data relating to the generation, distribution and utilisation of electricity throughout India and to act as the Central Bureau of Information on all matters relating to the public electricity supply ;
- (j) to initiate schemes and arrange for the training of Indian Engineers in India and abroad in all aspects of river valley development and electricity supply industry ;
- (k) to standardise instruments, methods of observation and record, materials and construction, designs and operational features ;
- (l) to review and lay down for the whole of India standard voltages and practices for generation, transmission and distribution of electrical energy ;
- (m) to conduct and co-ordinate research on the various aspects of river valley development schemes such as flood control, irrigation, navigation, power development etc., and the connected structural and design features ; and
- (n) to conduct experiments, research, propaganda, and generally to carry out such other activities as will promote the spread and use of electricity throughout the country, in particular in the semi-urban and rural areas.

ORDER

ORDERED that Resolution No. EL-1-201(1), dated the 16th January, 1948, setting up the Central Electricity Commission and Resolution No. DW.XVI-1(1), dated the 16th January, 1948 setting up the Central Waterpower, Irrigation and Navigation Commission, shall stand cancelled and that this Resolution be communicated to all State Governments, all Chief Commissioners, the Several Ministries of the Government of India, Prime Minister's Secretariat, Cabinet Secretariat, Parliament Sectt., the Private and Military Secretaries to the President, all Indian Embassies and the High Commissioners for India in foreign countries, the Planning Commission and the Comptroller and Auditor General of India.

ORDERED ALSO that the Resolution be published in Gazette of India, for general information.

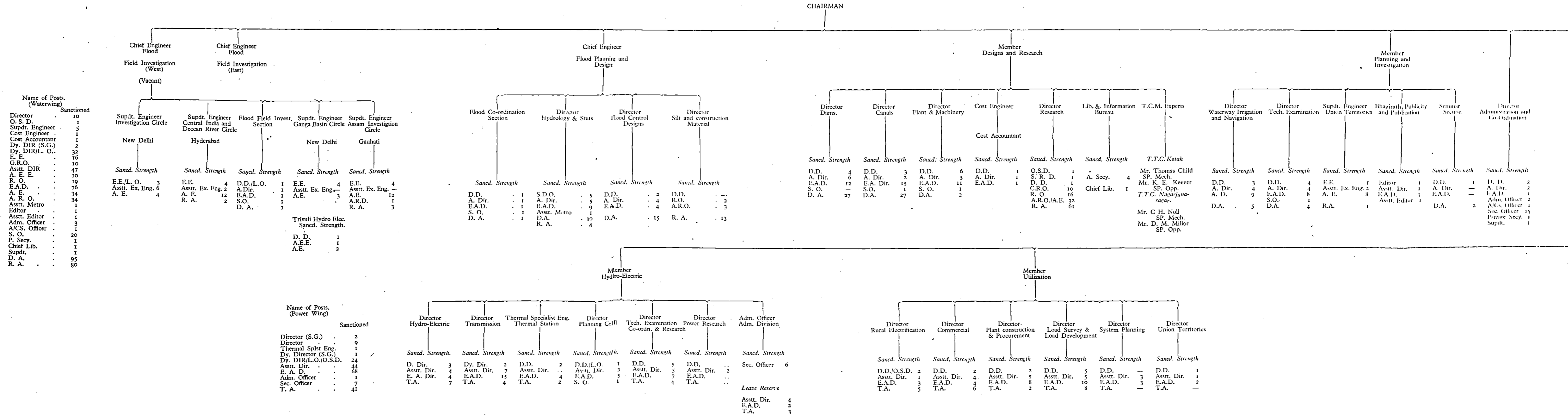
(Sd.) A. N. KHOSLA,

Addl. Secretary to the Govt. of India.

ORGANISATION CHART OF CENTRAL WATER AND POWER COMMISSION
(AS ON THE 1ST JUNE, 1958)

LEAVE RESERVE

Asstt. Dir. 8
E. A. Dir. 6



APPENDIX III

(Reference paragraph 5.22)

NAMES OF SCHEMES THAT HAVE SO FAR BEEN ENTRUSTED TO THE CENTRAL WATER AND POWER COMMISSION FOR INVESTIGATIONS.

I. *Andhra Pradesh and Orissa.*

(1) Vamsadhara Project (Investigations of alternative site at Gudari).

II. *Assam.*

(2) Kopili Project.

(3) Jamuna Irrigation Scheme.

(4) Killing Project.

(5) Borpani Project.

(6) Barak Dam Project.

(7) Diyung Dam Project.

(8) Investigations of Dam sites in the Dehing basin (Namphuk, Namchik and Tirap).

(9) Subansiri Dam Project.

(10) Manas Project.

III. *Bihar.*

(11) Kosi.

IV. *Bombay.*

(12) Ukai Dam Project.

(13) Breoch Project.

(14) Sabarmati.

(15) Kakrapar.

V. *Jammu and Kashmir.*

(16) Reservoir Scheme on Chenab.

VI. *Madhya Pradesh.*

(17) Hasdeo Project.

(18) Upper Wainganga Project.

(19) Bah Project.

(20) Sagar Project.

(21) Halali Project.

(22) Barna Project.

(23) Kolar Project.

(24) Upper Ken Valley Development Scheme.

(25) Kesiyari Project.

(26) Nagda Project.

(27) Raigon Project.

(28) Paveri Canal Scheme.

(29) Cnatat Reservoir Scheme.

- (30) Nagod Canal Scheme.
- (31) Unchera Canal Scheme.
- (32) West Sohawal Scheme.
- (33) Punasa Dam Project.
- (34) Bara Talav Scheme.
- (35) Sindh Reservoir Scheme.
- (36) Chachai Development Scheme (Touo river).
- (37) Bargi.
- (38) Tawa.
- (39) Upper Mahanadi Project.
- (40) Jonk Project.

VII. *Madhya Pradesh and Bombay.*

- (41) Investigations of dam sites below Punasa.

VIII. *Mysore (Coorg).*

- (42) Harangi Project.
- (43) Barapole.
- (44) Lakshmana tirtha.

IX. *Orissa.*

- (45) Hirakud Project.

X. *Rajasthan.*

- (46) Banas Project.
- (47) Kantli Project.
- (48) Rajasthan Canal Project.

XI. *West Bengal.*

- (49) Ganga Barrage (Farraka).

FLOW CHART OF SCRUTINY OF PROJECTS BY CENTRAL WATER AND POWER COMMISSION

APPENDIX IV

I. WATER WING

Ref. paragraph 5.21

Name of Project & Amount	Date of receipt in C.W.P.C.	Reference to different Directorate and receipt back	Comments by C.W.P.C.	Reply by State Chief Engineer	Further comments by C.W.P.C.	Reply by State Chief Engineer	Final comments by C.W.P.C.	Time lag between columns (2) & (8) (in months)	Remarks
1	2	3	4	5	6	7	8	9	10
1. Salki Project, Orissa. Rs. 52.85 lakhs.	5-9-55	..	7-11-55	20-3-56	31-7-56	6-12-56	21-2-57	17	Projects below Rs. 1 crore (S. No. 1 to 4) are examined in T. E. Directorate only. Those above Rs. 1 crore (S. No. 5-7) are examined in the various Directorates concerned and consolidated in Technical Examination Directorate which alone correspond with the State Chief Engineers. The field of scrutiny is the same in both cases, viz. (a) Planning (b) Hydrology. (c) Irrigation. (d) Designs.
2. Suwarna Project, Andhra Rs. 44.18 lakhs.	10-1-58	..	4-3-58	13-4-58	..	..	1-5-58	4	
3. Jambadahalla Project, Mysore. Rs. 40.0 lakhs.	4-11-55	..	8-6-56	8-9-56	..	..	20-12-56	13	
4. West Banas Irrigation Project, Rajasthan. Rs. 48.75 lakhs.	4-9-56	..	14-3-57	25-3-57	..	..	4-6-57	9	
5. Halhimati Reservoir Project, Bombay. Rs. 184 lakhs.	14-7-55	Canals Dams	21-7-55 19-12-55 21-7-55 27-8-55	17-7-56	29-9-56	26-12-56	

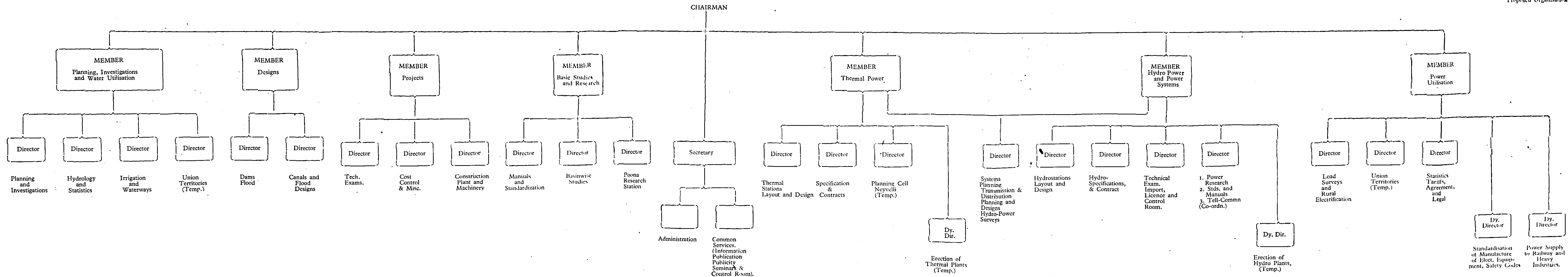
	1	2	3	4	5	6	7	8	9	10
			H. & S. 5-9-55 28-10-55							(e) Estimate. (f) Financial Returns and Forecasts.
			WIN . 14-9-55 10-12-55							
			Fin. Officer . 14-9-55							
			P. C. . 12-10-55							
6. Maja Reservoir Project, U. P.] Rs. 177 lakhs.	31-5-56	Canals . 3-6-55 5-11-55	7-12-55	31-3-56	28-3-57	12-6-57	8-11-57		29	
		Dams . 21-7-55 6-10-55								
		H & S] 3-6-55 7-7-55								
		WIN . 3-6-55 22-9-55								
		Fin. Officer . 8-8-55								
		P. C. . 10-9-55								
7. Meswa Reservoir Project Bombay, Rs. 121.57 lakhs.	20-7-55	Canals . 21-7-55 9-12-55	14-8-57	14-11-56			14-2-57		19	
		Dams . 21-7-55 13-1-56								
		WIN . 13-9-55 15-12-55								
		H. & S. 8-9-55 13-1-56								
		F.O.P.C. 8-9-55 13-1-56								

II. POWER WING

8. Transmission & Distribution, Madras. Rs. 1591 lakhs.	13-1-55	Transmission.	19-1-55 25-1-55 9-6-55 25-6-55	30-4-55	5-6-55 (First Revised Report)	..	22-11-55 (Final Scheme Report)	14-2-56	13	After receipt of the first revised report on 5-6-55 further discussions were held with the C.E. as a result of which the final scheme report was prepared by him and sent.
		Rural Elect.	19-1-55 23-3-55 26-11-55 11-2-56							
9. Panniar H. E. Scheme Kerala, Rs. 324.0 lakhs.	17-1-55	Hydro-Electric	28-1-55 2-4-55	30-8-55	17-10-55	4-6-56	..	20-8-56	19	(i) Only one copy of the Scheme Report was received on 17-1-55. Additional copies were received on 18-3-55.
		Water Wing	19-3-55 14-12-55							(2) After sending further comments of C.W.P.C. on 4-6-56 discussions were held with the C. E. on the basis of which final comments were sent on 20-8-56.
		Transmission	21-3-55 22-3-55							
10. Birsinghpur Thermal Power Station, Madhya Pradesh. Rs. 1062.69 lakhs	26-5-57	Thermal	28-5-57 13-7-57	9-10-57	27-11-57	..	6-6-58	22-8-58	15	Discussions were held with the C. E. after receipt of his comments on 27-11-57 as a result of which the final scheme report was sent by him on 6-6-58.
		Transmission.	16-7-57 9-8-57 18-6-58 21-8-58							

1	2	3	4	5	6	7	8	9	10	
11. Umtynagar Steam Power Station, Assam. Rs. 193.13 lakhs.	12-2-56	Thermal	16-2-56 14-8-56 27-5-57 3-6-57	..	17-5-57 (Revised)	24-3-57	16-12-57	20-2-58	24	(1) Discussions were held with C. E. before final comments were sent. (2) Assistance was given to Assam Engineers to finalise the scheme report.
12. Sibru H. E. Project Stage I, Andhra Pradesh. Rs. 927.58 lakhs.	13-7-55	H.E.	21-7-55 2-8-55 10-5-58 12-5-58	13-9-55	..	..	13-4-58 (Revised report).	27-10-58	39½	There were :— (1) Discussions between Water Wing and the C.E. (2) Visit to site by Member.
		Transmission	21-7-55 9-8-55 24-4-58 21-7-58							
		W. W.	21-7-55 4-6-56 10-5-58 27-8-58							
13. Barajadi (1) Suvendranagar Bombay (2) Rs. 70.0 lakhs.	2-11-57 (Transmit) 4-9-58 (Distt.)	Transmission	12-11-57 7-3-58	7-6-58	15-7-58	22-7-58	4-9-58	26-10-58	12	
		R. E.	20-9-58 3-10-58							
		Load Survey and Load Dev.	15-5-58 29-5-58							

CENTRAL WATER AND POWER COMMISSION



APPENDIX VI

SUMMARY OF RECOMMENDATIONS

- | Serial No. | Para. No. | |
|------------|-----------|---|
| 1 | 4·17 | The functions of the C. E. A. other than arbitration, as laid down in Section 3 of the Electricity (Supply) Act, 1948, should, by an amendment of the Act, be taken out of its purview. The C. E. A. should be renamed as the Standing Arbitration Board. |
| 2 | 4·28-29 | The States which have not yet been able to equip themselves with technical organisations to reasonable standards, should be assisted to do so within as short a time as practicable. A time limit should be set for liquidating organisations created in the C. W. & P. C. for the purpose of rendering routine assistance to the States. |
| 3 | 4·30 | There should be a proper balance between the functions that should be organised at the Centre and in the States in the Power Sector. |
| 4 | 4·33 | An embargo should be placed on expansion of activities of the C. W. & P. C., if adequately trained staff is not available. |
| 5 | 5·02 | Each State Government/Electricity Board should have the following minimum organisations:—
(i) an investigations and planning cell ; and
(ii) a designs cell. |
| 6 | 5·03 | The States/Electricity Boards should make their own arrangements for load survey. Suitable measures, as suggested should be taken by the C. W. & P. C. to see that the States Boards do not inflate their figures. |
| 7 | 5·05-06 | A Plan of Assistance, on the lines of the Colombo Plan, should be organised to pool the experienced technical personnel of the Centre and the States in the I. & P. Sector, for use wherever they are needed most. The Planning Commission may appoint a Committee of two or three Engineer Consultants and a Senior Finance Officer with administration and management experience to make a quick assessment of the needs of the States in trained manpower in the I. & P. Sector. |
| 8 | 5·07 | The functions of the re-organised C. W. & P. C. should be generally to:
(a) formulate an all-India Plan of action embracing the Centre and the States; |

- | Serial No. | Para. No. | |
|------------|-----------|---|
| | | (b) review the original work done in the States from an all-India angle; and |
| | | (c) assist the States with the necessary technical staff in an emergency. |
| 9 | 5·08 | For an adequate technical appreciation of the Plan proposals, the C. W. & P. C. should consolidate relevant data basin-wise and develop plans from these data in order to check that the proposals made lead to the optimum use of the resources on an economic basis, and also that the schemes are technically sound, financially feasible, and have been fully investigated. |
| 10 | 5·09 | The responsibility of the C. W. & P. C. in the basin-wise studies should be (i) to lay down a time table for such studies, (ii) to apportion the work amongst the State Governments, and (iii) if necessary, to recommend measures for assistance to the State Governments for this purpose.

The major gaps in the basin-wise data should be filled within the next five years so that a greater degree of accuracy is imported into the planning of Irrigation and Power Projects than hitherto. |
| 11 | 5·10 | The C.W. & P.C. should not devote detailed attention to schemes costing below Rs. one crore. It may, if necessary, review such schemes broadly, when inter-State interests are involved. |
| 12 | 5·11 | The State Governments should plan in advance the priorities and types of projects costing below Rs. one crore and send to the C.W. & P.C. only a brief description of such projects in a proforma designed for this purpose, to enable the C.W. & P.C. to see (i) whether any inter-State ramifications arise, and (ii) whether an ordinary irrigation Project is being included as a flood project. A detailed examination by the C.W. & P.C. will be necessary only if any projects answer the above description. |
| 13 | 5·13 | The C. W. & P. C. should plan the work of obtaining basic hydrological data necessary for basin-wise studies. The actual collection of such data should be entrusted to the States. |
| 14 | 5·15 | The Commission should lay down a definite time-schedule for basin-wise studies taking into account the part to be played by the States, and should place it before the Co-ordination Board of Ministers for adoption. |

- | Serial No. | Para. No. | |
|------------|-----------|---|
| 15 | 5·16 | The Commission should periodically evaluate the basic studies and send regular reports thereon to the I. & P. Ministry and the States. |
| 16 | 5·17 | An additional post of Member should be created for a period of 3 to 5 years for implementing the programme of basic studies. |
| 17 | 5·18-19 | The C.W. & P.C. should continue to function as the Central Organisation for the preparation of designs of a complicated nature. Such work should be undertaken only on request and the technical officers of the State/Project concerned should be associated with the preparation of designs. A Scheme should also be drawn up for the utilization of the experienced personnel for designs work from projects nearing completion. |
| 18 | 5·23 | Investigations should, in future, as far as possible, be taken up by the States only. The existing staff engaged on this work in the C.W. & P.C. should be dispersed to the States after the investigations in progress have been completed. |
| 19 | 5·24 | The C.W. & P.C. should prepare a programme for investigations and, in consultation with States, demarcate the staff required having regard to its total availability. Periodic conferences of the I. & P. Ministry and the States may be held in order to evaluate the progress made in respect of the investigations. |
| 20 | 5·31 | All Projects costing below Rs. one crore should be dealt with by the State Chief Engineers except in cases where their inter-State implications are required to be examined by the C.W. & P.C. |
| 21 | 5·32 | A drill for authorisation of projects in future prescribed in this paragraph, has been suggested for adoption. |
| 22 | 5·33 | The C.W. & P.C. should not undertake construction work. The existing Erection Unit for small thermal plants may, however, continue until the States have equipped themselves for such work. |
| 23 | 5·34-35 | The Commission should concern itself with the progress of construction and phasing of projects by (i) receiving regular progress reports (ii) personal visits; and (iii) by attending Control Board meetings. The evaluation of selected projects may continue to be organised by the Committee on Plan Projects. |

- | Serial
No. | Para.
No. | |
|---------------|--------------|---|
| 24 | 6·03-04 | The C. W. & P. C. should continue to function as an Attached Office. Neither its Chairman nor Members need be given any <i>ex-officio</i> status in the Ministry. |
| 25 | 6·05-08 | The following items of work should be transferred from the C.W. & P.C. to the Ministry: <ul style="list-style-type: none"> (i) allocation of foreign exchange; (ii) rationalisation and distribution of plant and machinery; and (iii) allocation of scarce materials. <p>Technical officers may be appointed in the Ministry to handle this work.</p> <p>The C. W. & P. C. should, however, be kept informed about the material prepared in the Ministry on these subjects, and should also be associated with final discussions involving high level technical appreciation.</p> |
| 26 | 6·09 | The work relating to Parliament questions should be handled in the Ministry as far as possible. The C.W. & P.C. should be consulted only where there is a likelihood of its making some contribution. |
| 27 | 6·10-12 | The Commission should examine the issues referred to it as a corporate body. Important matters including projects received for scrutiny should initially be placed before the Commission. Detailed examination in the Directorates should be undertaken only after the Commission has given its directions. The Commission should also review the work of each Directorate once a month. |
| 28 | 6·13 | It would add to the efficiency of the Commission if 25% of the posts of Deputy Directors and below were reduced. The 'details of the lower staff should be worked out in consultation with the Ministries of I. & P. and Finance. |
| 29 | 6·14 | There is considerable scope for level-jumping in the flow of work, <i>i.e.</i> , cases, other than complicated issues, can go from Deputy Director directly to the Member. |
| 30 | 6·15 | All fresh receipts should be seen by the Director, and he should submit the more important ones to the Member. |
| 31 | 7·03 | The work of the Commission would be adequately carried out by a Chairman, seven Members, and a Secretary. |

- | Serial No. | Para. No. | |
|------------|-----------|---|
| 32 | 7·04 | Four out of the seven Members should deal with water resources; three with power development. The total number of Directorates should be 23. |
| 33 | 7·05 | The seven Members proposed will have the following broad distribution of work among themselves:—
(1) Planning, Investigations and Water Utilization;
(2) Designs;
(3) Projects ;
(4) Basic Studies and Research ;
(5) Thermal Power ;
(6) Hydro Power and Power Systems; and
(7) Power Utilization. |
| 34 | 7·06 | There should be no separate Flood Wing in the Commission. The various Members should deal with such aspects of floods as pertain to subjects included in their respective charges. |
| 35 | 7·08 | Member, Planning, Investigations and Water Utilisation, will be in-charge of the following Directorates:—
(i) Planning and Investigations ;
(ii) Hydrology and Statistics;
(iii) Irrigation and Waterways; and
(iv) Union Territories (Temporary). |
| 36 | 7·13-14 | Member, Designs, will have the following Directorates under him:—
(i) Canals including Flood Designs;
(ii) Dams.
He should be placed in exclusive charge of these Directorates to enable him to devote undivided attention to designs work. |
| 37 | 7·15-16 | Member, Projects, will deal with the following Directorates :—
(1) Technical Examination ;
(2) Cost Control; and
(3) Construction Plant and Machinery.
He will normally attend the meetings of the Control Boards except in cases where the presence of any other Member is necessary. He will also be in charge of miscellaneous work in the Commission, such as tendering advice to other Ministries and Projects. This work should be handled, under his guidance, by a Deputy Director. |

- | Serial No. | Para No. | |
|------------|----------|---|
| 38 | 7·17 | Member, Basic Studies and Research, will have the following Directorates under him:—
(1) Manuals and Standardisation ;
(2) Basin-wise Studies; and
(3) Research Station, Poona. |
| 39 | 7·21 | Member, Thermal Power, will be solely in charge of the work of planning and execution of installation of Thermal Stations. He will have the following three Directorates under him :—
(1) Thermal Stations, layout and designs ;
(2) Thermal Stations, specifications and contracts; and
(3) Planning Cell, Neyvelli (Temporary).

Active measures should be taken for training engineers in the techniques of large high pressure steam power stations. |
| 40 | 7·22-23 | Member, Hydro Power and Power Systems, will deal with the following Directorates:—
(1) Hydro Stations, layout and designs;
(2) Hydro Stations, specifications and contracts ;
(3) Technical Examination; and
(4) Power Research, Standardisation and Manuals, Tele-Communication Co-ordination. |
| 41 | 7·24 | There is no justification for a separate Member for Transmission and Distribution of power. A senior Director should handle this work. He should also supervise hydro-electric power surveys. |
| 42 | 7·25 | The growth of low voltage distribution and rural supply lines should be reviewed in a separate Directorate in the Power Utilisation Section. |
| 43 | 7·26 | Technicians for erection and commissioning of large power generating plant should be rapidly trained and developed in the power systems of the States/ Electricity Boards. The Irrigation and Power Ministry should collect from all the States/ Projects full details of expenditure on foreign technicians and consultants, separately for Water and Power Projects. |
| 44 | 7·27-28 | Two Erection Squads (one Hydro and one Thermal) may be built up in the Central Water and Power Commission on a temporary basis for helping areas that are relatively under-developed. These should in due course be transferred to the N.P.C.C. |

- | Serial No. | Para. No. | |
|------------|-----------|--|
| 45 | 7-29 | Member, Power Utilisation, will have the following Directorates under him:—
(1) Load Surveys and Rural Electrification ;
(2) Statistics, Tariffs and Legislation; and
(3) Union Territories (Temporary). |
| 46 | 7-30-31 | The States Electricity Boards should themselves undertake load survey of the areas within their jurisdiction. The field staff of the Load Survey Directorate of the Central Water and Power Commission together with the work in hand should be transferred to the States/Boards. |
| 47 | 7-32 | It is not necessary for the Central Water and Power Commission to equip itself for rendering high level technical advice to heavy industries in the Public sector, railways, or manufacturing industries producing heavy and light electrical machinery, etc. The Commission should advise such industries only in regard to proper power supplies for their working, and standardisation of electrical equipment used by them to conform to practices employed in the field of general power supply. To handle the increasing volume of work in this regard, two Deputy Directors may be appointed to head two Directorates in the Utilisation Section. |
| 48 | 7-33-34 | Administrative matters of the Commission should be handled in one place in a unified manner under the charge of the Chairman. The Chairman should be assisted by the Secretary to the Commission in managing common services. |
| 49 | 7-35-37 | The re-organised Commission will not have the following existing Directorates :
(1) Plant and Machinery ;
(2) Silt and Construction materials;
(3) Flood Control Designs; and
(4) Four Investigation Circles and two Flood Sections. |

The work in respect of (1) will be largely transferred to the Irrigation and Power Ministry. The Directorate of Construction, Plant and Machinery, provided for under Member (Projects) would deal with construction plant layout and other construction problems.

The Directorate at (2) should be abolished and the existing laboratory at Delhi amalgamated with the

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| | | The work at present being done in the Directorate of Flood Control Design should in future be dealt with in the Canals Directorate under Member (Designs). Similarly, the work being done in the other two sections of the Flood Wing should be distributed among the appropriate Directorates according to the nature of work. Investigation work should be transferred to the States. Any residual work in respect of flood investigations and co-ordination may be done in the Directorate of Planning and Investigations. |
| 50 | 7-38 | The proposal to set up a unit in the Commission for assessment of efficiency of operation and management of electric supply undertakings in the public sector should be deferred till the electricity systems in the States have gone beyond the present developmental stage and get stabilised. |
| 51 | 8-03 | The posts of Members and the Chairman should continue to be tenure posts. The normal tenure of these posts should be five years. A Chairman or Member may continue to serve up to the age of 60 years provided his total term in the Commission as a Member, Chairman or both, does not exceed five years. The field of selection for Members/Chairman should be restricted to eminent Chief Engineers with construction experience of at least two years in the capacity of Chief Engineer. A Director of the Commission will become eligible for selection only if he has acquired experience for at least two years in the capacity of Chief Engineer in a State, Project or Electricity Board. |
| 52 | 8-04 | A Selection Committee should be appointed to advise the Ministry of Irrigation and Power in the choice of Chairman and Members. |
| 53 | 8-08 | One-half of the posts in the grades of Directors and Deputy Directors should be filled by Officers on deputation from the States, and the other half should be filled by promotion of officers of the Commission in the grades next below. One-half of the posts of Assistant Directors should be filled by officers on deputation from the States, and the other half by direct recruitment through the Union Public Service Commission. |
| 54 | 8-09 | The posts of E. A. Ds. should be abolished. |
| 55 | 8-10 | There should be no cadre of Design Assistants, Computers and Draftsmen should be employed instead, for technical jobs of routine nature. |

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56	8-11	The cadre strength of the various posts below the Director's level, should be reviewed and fresh recruitment suspended till the re-organisation is completed.
57	8-13	The States should be persuaded to enlarge their engineering cadres to provide for an adequate reserve for deputation to the Centre. If they do not accept the proposal, the programme of work should be curtailed.
58	14-15	A Committee should be appointed for selection of officers from the States. The States should be associated with the procedure of selection of officers for deputation to the Commission by giving them representation on this Committee.
59	8-16	The period of tenure should be strictly adhered to.
60	8-17	No officer should become eligible for promotion to the next higher rank unless he has adequate field experience in his grade. The Commission should depute its officers to the States, Projects and Electricity Boards for field training according to a carefully planned programme.
61	8-18	If the heavy back-log of untrained officers does not permit arrangements being made for thier training, as recommended in the Report, some suitable interim arrangements may be made to provide them with the elements of essential experience required for manning the higher posts.
62	8-19	The training should at present be accommodated within the present strength of the C.W. & P.C. When the strength has been fixed on the basis of a detailed work-study, a suitable training reserve should also be provided.
63	8-21	Full use should be made of the N.P.C.C. for imparting field training to the officers of the C.W. & P.C., by drawing a certain proportion of the staff of the Corporation from the training reserve of the Commission.
64	8-22	When an officer with the requisite experience is not available for promotion to a particular vacancy the available officer, not ordinarily included in the field of selection, should not be promoted on a regular basis. He should be placed in charge of the higher post on his existing salary plus a small allowance.
65	8-23	The selection grades should be suitably revised. These should ordinarily be intended to prevent stagnation in a cadre when an officer in the ordinary grade has reached the maximum of the scale and

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		avenues of further promotion are not available for the time being.
66	8·24	The grade of S. E. should be abolished.
67	9·02	The C.W. & P.C. should not be split up into two organisations.
68	9·07	The Commission should work as a corporate body. It should hold weekly meetings to consider important technical and administrative problems. A formal record of the proceedings should be sent to the Ministry who should scrutinise them to ensure that the Commission functions as a corporate body.
69	9·09	There is no justification for any considerable expansion of the responsibilities of the Power Wing for rendering assistance to heavy industries in the Public sector, railway electrification schemes, production of power by nuclear energy or industries producing heavy and light electrical machinery.
70	9·10	A panel of consultants drawn from the ranks of outstanding retired engineers should be constituted for consultation concerning individual projects or problems and for checking up designs originally prepared by the C.W. & P.C.
71	9·11	The advice of the C.W. & P.C. in technical matters should be accepted by the Ministry of I. & P., the Planning Commission and the States.
72	9·12	The C.W. & P.C. should continue to handle the work relating to carrying out investigations and collecting and recording power data, and co-ordination of activities of the planning agencies in relation to the control and utilisation of power resources. The Electricity (Supply) Act, 1948 should be amended to relieve the C.E.A. of these functions.
73	9·13	The engineers employed in the Control Room should be replaced by statisticians as early as possible.
74	9·14	Officers of middling seniority from the Commission/States should find adequate representation in the composition of delegations sent abroad.
75	9·15	The C.W. & P.C. should be treated on the lines analogous to the various National Laboratories and provided with proper office and housing accommodation to facilitate high-level technical work.